

**The New Hampshire
Section
AMERICAN SOCIETY
of
CIVIL ENGINEERS**



**Presents The
1980
Outstanding Civil Engineering
Achievement Award
to the
Winnepesaukee River Basin Control
Project**

**Presentation
May 22, 1980
Pheasant Ridge
Country Club
Gilford, N.H.**

**Tour
May 22, 1980
Franklin Wastewater
Treatment Facility
Franklin, N.H.**

INVITED GUESTS

Advisory Board

Winnepesaukee River Basin

Frank R. DeNormandie,
Chairman, Laconia

Richard A. Fournier
Belmont

Philip L. Munck
Franklin

Richard LaCasse
Gilford

Edmund Schuette
Meredith

Edward M. Zimmerman
Northfield

Donald Foudriat
Sanbornton

James Walker
Tilton

Awards Jury

NH Section, American Society of Civil Engineers

Wesley E. Brown, Chairman
Clarence Ahlgren
Carolyn d'Entremont
Philip Laurien
Thomas F. Moran

AWARD

“Outstanding Civil Engineering Achievement”

WINNIPESAUKEE RIVER BASIN CONTROL PROJECT

The New Hampshire Section of ASCE has designated the Winnepesaukee River Basin Control Project for its 4th annual award. This award is bestowed upon those New Hampshire engineering projects which demonstrate excellence in engineering design and construction, and which represent a significant contribution to mankind and the engineering profession. Previous awards have been given to the Manchester Water Pollution Control Facility, the Wolfeboro Sewage Treatment Spray Irrigation Facility and Nashua's Mine Falls Park.

This project is unique both in the size of the area served and in

the administrative organization which places the State of New Hampshire as the owner-operator of the facility on behalf of the eight communities presently served by the project.

In the 1960's the declining water quality of the region's lakes, particularly Lake Winnisquam, led to a Basin Study supported by the region's tourist-minded communities. It was evident from the study that future improvement in the region's economy was directly tied to the resolution of the serious water pollution problems. In 1972 the New Hampshire Legislature supported the Study's recommendations that a Basin-wide system would provide the most cost effective project, and they subsequently passed legislation providing for administration and funding for design and construction.

Construction began in 1977 and today more than 32 miles of major interceptor sewers deliver 3.0 million gallons daily to the fully functioning Franklin Wastewater Treatment Facility. By the design year 1997 the sewer extensions will serve about 50,000 people and the sewage flow will approach the design capacity of 11.5 million gallons per day.

The treatment plant is an activated sludge facility and includes the provision to anaerobically digest sludge before final disposal. Methane gas produced by the digestion process is utilized to maintain operative temperatures within the digesters and, additionally, as a supplementary energy source for heating the plant structures.

The concept of the wastewater treatment plant was developed by CE Maguire, Inc., and the final design of the plant was accomplished by SEA Consultants, Inc. The construction of the plant was completed by Murray-Walter, Inc. It is noteworthy that the entire system includes major design contributions by nine consulting engineering firms and construction efforts by fourteen construction firms.